

Organolithium Synthesis of Hydrocarbons and  
Their Oxygen-Containing Derivatives

SOV/74-27-12-3/4

hydryl phenyl ether which was substituted by alkali metal. In the last investigation of this series it was proved (Ref 6) that the isomerization product in tetrahydro furan yields 85 - 93% and that it is the lithium alkyls which have the highest isomerizing effect in the metal alkyl series. Furthermore, the isomerization mechanism was described in all the details and the relative capacity of lithium and other metals to form complexes as well as the properties of such complexes were investigated (Refs 7 and 8). This survey is subdivided into 4 chapters. Chapter one deals with the methods employed for the synthesis of organic lithium compounds on the basis of investigations carried out by Gil'man, Vavon, Braude, Kocheshkov, Mikhaylov and others. In the second chapter the reactions of condensation of organic lithium compounds with alkyl halides and aryl halides are described. Chapter three deals with the condensation of organic lithium compounds with aldehydes, ketones and esters, i.e. the synthesis of alcohols and glycols is described, which, owing to the great reactivity of organic lithium compounds, almost always proceeds according to normal schemes. According to the normal method not only

Card 3/4

• Organolithium Synthesis of Hydrocarbons and  
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SOV/74-27-12-3/4

saturated but just as well unsaturated alcohols and glycols can be synthetized since lithium forms reactive derivatives even from  $\alpha$ -alkyl halides. Finally, the fourth chapter deals with the additions of organic lithium compounds to multiple bonds of conjugate hydrocarbon dienes and carbons of the olefin series. These reactions are quite likely to be of greatest importance for the industry employing organic synthesis. There are 130 references, 21 of which are Soviet.

Card 4/4

88921

S/153/60/003/006/003/009  
B103/B206*11.1210*AUTHORS: Sokolova, Ye. B., Shebanova, M. P.TITLE: Synthesis of some homologs of cyclohexane with a composition  
 $C_{15} - C_{19}$  with raised "volume" heat of combustionPERIODICAL: Izvestiya vysshikh uchebnykh zavedeniv. Khimiya i  
khimicheskaya tekhnologiya, v. 3, no. 6, 1960, 1040-1044TEXT: The authors report on the synthesis of monoalkyl-substituted cyclohexane homologs of the type  $C_{15} - C_{19}$  with branched alkyl chain and on the determination of their physical and chemical properties, among them of the "weight" and "volume" heat of combustion of artificial mixtures of some synthesized naphthene- and isoparaffin hydrocarbons. The effect of mixing on the heat-of-combustion value was to be clarified by the latter experiment. Table 1 contains the physical properties of: I. 2-methyl-4-ethyl-4-cyclohexyl hexane, II. 2,2,5-trimethyl-3-cyclohexyl hexane, III. 2,2,4,6-tetra-methyl-4-cyclohexyl heptane, IV. 2-methyl-5-propyl-5-cyclohexyl octane,

Card 1/6

88921

S/153/60/003/006/003/009

B103/B206

Synthesis of some homologs of...

V. 5-butyl-5-cyclohexyl nonane, VI. 2,6-dimethyl-4-isobutyl-4-cyclohexyl heptane, VII. 4,9-dipropyl dodecane, and VIII. 5,10-dibutyl tetradecane. The properties and heat of combustion of the mixtures are given in Table 2: A = III, B = VII, C = VIII. The density and heat of combustion of the synthesized naphthene hydrocarbons are higher by about 3% than the corresponding values of their analogs with a normally built-up aliphatic chain. The authors conclude from Table 2 that the heat of combustion of the above mixtures follows the rule of additivity. T. A. Zhuravleva and L. P. Abramova participated in the experimental part. It follows therefrom that the cyclanes were prepared from suitable, alkylated benzene homologs by hydrogenation on Raney nickel (Ref. 7). There are 2 figures, 2 tables, and 8 references: 6 Soviet-bloc and 1 non-Soviet-bloc.

ASSOCIATION: Moskovskiy khimiko-tehnologicheskiy institut im. D. I. Mendeleyeva; Kafedra tehnologii neftekhimicheskogo sinteza  
(Moscow Institute of Chemical Technology imeni D.I.Mendeleyev;  
Department of the Technology of Petrochemical Synthesis)

SUBMITTED: January 30, 1959

Card 2/2

S/079/60/030/04/10/080  
B001/B016

5.3400

AUTHORS:

Petrov, A. D., Sokolova, Ye. B., Gao Chin-lan

TITLE:

Reaction of Tert-butyl Lithium With Acid Esters

PERIODICAL:

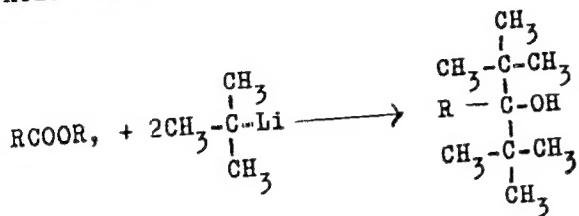
Zhurnal obshchey khimii, 1960, Vol. 30, No. 4,  
pp. 1107-1117

TEXT: In continuation of the papers by the authors (Refs. 1,2), i.e. the reactions (1) and (2) in which magnesium was finally replaced by Na, lithium was used instead of sodium in the present investigation, and the synthesis was performed in two stages instead of one. The condensation of the Li-alkyl with the esters took place at very low temperature ( $-35^{\circ}$ ,  $-40^{\circ}\text{C}$ ). The reaction prevalently took place accord. ng to the folowing scheme (3) with good yield:

Card 1/3

Reaction of Tert-butyl Lithium With  
Acid Esters

80753

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B001/B016

X

In contrast to the tert-butyl magnesium chloride which reacts anomalously with esters, the tert-butyl lithium reacts with esters of mono- and dibasic acids at  $-35$ ,  $-40^\circ$  in a normal way. In the case of the esters of monobasic acids (the saturated ones from  $\text{C}_2$  to  $\text{C}_9$ , and the unsaturated undecylenic acid), the yields in tertiary alcohols fluctuated between 30 and 80%. In this connection, ketones  $\text{RCOR}_2$  occurred as by-products the yield of which increases when the chain of the radical of the initial acid is elongated. In the case of formic acid ester, also a product of the normal reaction, the di-tert-butyl carbinol, results in an 85% yield. In esters of dibasic acids of high molecular weight such as adipic, azelaic,

Card 2/3

Reaction of Tert-butyl Lithium With  
Acid Esters

S/079/60/030/04/10/080  
B001/B016

sebacic acid, the yield in di-tertiary glycols is 25-35%. In addition to them, tertiary diketones and keto alcohols are formed as by-products. When using esters of low-molecular acids, e.g. succinic and oxalic acid, no glycols result but keto alcohols and diketones. In the case of oxalic acid, a secondary keto alcohol is formed in addition to the tertiary one. The reaction of the esters of dibasic acids is represented by reaction (4). The ester of malonic acid reacts with tert-C<sub>4</sub>H<sub>9</sub>Li according to a complicated scheme to give pinacoline, hexamethyl acetone, and di-tert-butyl carbinol (last scheme suggested). Five tables illustrate the investigation results. There are 5 tables and 18 references, 5 of which are Soviet.

ASSOCIATION: Moskovskiy khimiko-tehnologicheskiy institut imeni  
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imeni D. I. Mendeleyev)

SUBMITTED: April 27, 1959

Card 3/3

53700

S/079/60/030/06/09/009  
B002/B016

AUTHORS: Sokolova, Ye. B., Shebanova, M. P., Zhichkina, V. A.

TITLE: Investigation of the Possibility of Substituting Higher Boiling Solvents for Diethyl Ether in the Ferrocene Preparation From Cyclopentadienyl-magnesium-bromide and Ferrous Chloride

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol. 30, No. 6, pp. 2040-2042

TEXT: The industrial manufacture of ferrocene according to the method mentioned in the title has so far not been possible when using diethyl ether as solvent, owing to its ready volatility. In this study, the attempt was made to substitute higher boiling solvents for the ether and to use ferrous chloride instead of the ferric chloride formerly added to the reaction mixture. Two experimental series were made: 1) freshly prepared cyclopentadienyl-magnesium-bromide +  $\text{FeCl}_3$ , which is reduced during the reaction to  $\text{FeCl}_2$ , in the solvents diethyl ether, di-n-butyl ether, diisooctyl ether, anisol, phenetol, triethylamine and dioxane. A higher yield

Card 1/3

Investigation of the Possibility of  
Substituting Higher Boiling Solvents for  
Diethyl Ether in the Ferrocene Preparation From Cyclopentadienyl-  
magnesium-bromide and Ferrous Chloride

S/079/60/030/06/09/009  
B002/B016

(61.3 and 45.7%) could only be obtained when using di-n-butyl ether and diisoamyl ether. No yield could be obtained with anisol and phenetol. If, however, dioxane was added in the latter cases in the 2nd reaction stage, a ferrocene yield of 38 and 40%, respectively, was obtained.

2) Cyclopentadienyl-magnesium-bromide +  $\text{FeCl}_2$  which had been reduced from  $\text{FeCl}_3$  prior to the reaction by means of chlorobenzene. In addition to the afore-mentioned solvents also tetrahydrofuran was used. It was shown that, *✓* when using diethyl ether or tetrahydrofuran in the first reaction stage, and adding  $\text{FeCl}_2$  in the second without solvent, a yield of 71.2% may be obtained. Anisol (1st stage), dioxane (2nd stage) gave a yield of 36.6% ferrocene. It was thus generally confirmed that the diethyl ether may be replaced by some other ethers and that by direct use of powdered  $\text{FeCl}_2$  in the solvents mentioned a higher yield may be obtained than that hitherto obtained by Kealy and Pauson (Ref. 1). In connection with the ferrocene reaction A. N. Nesmeyanov and E. G. Perevalova are mentioned.

Card 2/3

SOKOLOVA, Ye.B.; SHEBANOVA, M.P.; MRNKOVA, A.P.

Synthesis of the allyl-type bromide, C<sub>7</sub>H<sub>13</sub>Br, and its condensation by the Grignard-Wurtz reaction. Zhur. ob. khim. 30 no.7:2161-2164 Jl '60. (MIRA 13:7)

I. Moskovskiy khimiko-tehnologicheskiy institut imeni D.I. Mendeleyeva.  
(Butene) (Hydrocarbons) (Condensation products)

SOKOLOVA, Ye.B.; SHEBAPOVA, M.F.; SHCHEPINOV, S.A.

Organolithium synthesis and study of the properties of some  
 $\alpha$ -alkylnaphthalenes of the composition C<sub>18</sub> - C<sub>20</sub>. Izv.vys.ucheb.-  
zav.;khim.i khim.tekh. 4 no.4:617-620 '61. (MIRA 15:1)

1. Moskovskiy khimiko-tehnologicheskiy institut imeni Mendeleyeva,  
kafedra tekhnologii neftekhimicheskogo sinteza.  
(Lithium organic compounds) (Naphthalene)

110132

25b1b6

S/153/61/004/004/011/013

E141/E135

AUTHORS: Sokolova, Ye.B., Shebanova, M.P., and Ishkina, V.I.TITLE: Alkylation of toluene with crude isoctenePERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, vol. 4, no. 4, 1961, 657-660

TEXT: The authors attempted to synthesize the n-dialkyl-substituted C<sub>15</sub>H<sub>30</sub> cyclohexane, a possible component of hydrocarbon fuels. Toluene and isoctene were used as starting materials. 2,4,4-trimethylpentene-1 and 2,4,4-trimethylpentene-2, the isomeric forms of the isobutylene dimer (Ref. 1: A.D. Petrov, Khimiya motornogo topliva (Chemistry of motor fuel) Izd. AN SSSR, 1953, p. 101) were obtained from crude isoctene by threefold distillation. Crude isoctene contains a considerable fraction (5 weight %) which boils at a temperature up to 101 °C; this fraction was distilled on a 1100 mm high column. The fraction boiling between 99 and 102 °C (constituting about 7 weight %) was also used as alkylating agent. The alkylation reaction was carried out according to the Friedel-Crafts reaction, in the presence of AlCl<sub>3</sub>, under reaction conditions as described by Sanford

X

Card 1/2

Alkylation of toluene with crude ...

2846  
S/153/61/004/004/011/013  
E141/E135

(Ref.3) R.A. Sanford, S.M. Kovach, B.S. Friedman, J. Amer. Chem. Soc., Vol.75, 6327 (1953). The principal reaction product was the fraction boiling at 109 to 110 °C (75%). Its physical properties correspond to the properties of 2,2,4-trimethyl-4-(n-tetyl)-pentane which was previously described (Ref.3). The alkylation product was hydrogenated at a temperature of 180-190 °C for 15 hrs in an autoclave over a nickel catalyst and 2,2,4-trimethyl-4-(4-methylcyclohexyl)-pentane prepared; this compound has not been described previously in literature.

There are 3 tables and 4 references; 2 Soviet-block and 2 English. The English language references read as follows:

Ref.3, as in the text above.

Ref.4; D. Nightingale, J.R. James, J. Amer. Chem. Soc., Vol.66, 155 (1944).

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Petrochemical Synthesis, Moscow Chemical-technological  
Institute (meni D.I. Mendeleyev))

CARD 2/2  
SUBMITTED: June 26, 1959

S/079/61/031/001/025/025  
B001/B066

AUTHORS: Sokolova, Ye. B., Shebanova, M. P., and Nikolayeva, L. F.

TITLE: A New Variant of the Amino Method in Ferrocene Synthesis

PERIODICAL: Zhurnal obshchey khimii, 1961, Vol. 31, No. 1, pp. 332 - 333

TEXT: The "amino method" suggested by G. Wilkinson (Refs. 1, 2) by which ferrocene ( $C_5H_5FeC_5H_5$ ) is obtained in the condensation of cyclopentadiene with  $FeCl_2$  in the presence of organic bases is distinguished by its simplicity and the high yield (84 - 88 %) of the end product.  $FeCl_2$  is to be obtained in its active form by reduction of  $FeCl_3$  with powdery, finely ground metallic iron in tetrahydrofuran or dimethyl ether of ethylene glycol (Ref. 3). By observing all instructions given by G. Wilkinson for this amino method, the authors obtained ferrocene in a yield of 61 %, and not of 84 - 88 %; they apparently proceeded from initial products whose degree of purity was different. The highest ferrocene yield (65 %) was obtained by using butyl acetate instead of tetrahydrofuran. To simplify

Card 1/3

A New Variant of the Amino Method in  
Ferrocene Synthesis

S/079/61/031/001/025/025  
B001/B066

the synthesis of ferrocene, the data of the US patent 2719074 (Ref. 4) concerning the  $\text{FeCl}_2$  production were used. This method rests upon heating of  $\text{FeCl}_3$  with chloro benzene at  $140^\circ\text{C}$ ; the resultant  $\text{FeCl}_2$  was found to be highly active in the condensation with cyclopentadiene in the presence of diethylamine. For a convenient comparison of the experimental results, all experiments were carried out with equal quantities of the reactants (Table). The ferrocene yield was calculated for iron. As may be seen from the table, satisfactory results were obtained in the experiments of series A (reduction of  $\text{FeCl}_3$  by Fe), when using di-n-butyl ether, anisole, phenetole, ethyl butyrate, and butyl acetate as solvents.  $\text{FeCl}_3$  is not reduced to  $\text{FeCl}_2$  by metallic iron in pyridine, anhydrous alcohol, and acetone. If acetone is replaced by methyl isobutyl ketone, the ferrocene yield is 27 %. If in the above condensation triethylamine, pyridine, and sodium ethylate are used instead of diethylamine, the ferrocene yield suddenly drops. There are 1 table and 4 references: 1 Soviet and 3 US.

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Card 2/3

A New Variant of the Amino Method in  
Ferrocene Synthesis

S/079/61/031/001/025/025  
B001/B066

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskiy institut imeni  
D. I. Mendeleyeva (Moscow Institute of Chemical Technology  
imeni A. I. Mendeleyev)

SUBMITTED: February 4, 1960

Card 3/3

53750

27908

S/079/61/031/010/008/010  
D227/D304

AUTHORS: Sokolova, Ye. B., Shebanova, M.P., and Sheludyakov,  
V.D.

TITLE: Synthesis of di(methylindenyl)iron

PERIODICAL: Zhurnal obshchey khimii, v. 31, no. 10, 1961,  
3379-3381

TEXT: The purpose of the present work was to synthesize di(methylindenyl)iron and study its properties. Three methods of preparing the compound were used. 1) Reacting 1-methylindenylmagnesium bromide with ferrous chloride. 2) Reacting 1-methylindenyl-lithium with ferrous chloride. 3) Reacting 1-methyl-indene with ferrous chloride in the presence of diethylamine. In the first method, 1-methylindene was added to a magnesium ethyl bromide solution in di-n-butyl ether until the color of the mixture changed to brown when  $\text{FeCl}_2$  was added in portions. After refluxing for 5 hrs. at  $110-120^\circ\text{C}$  the mixture was distilled and the residue X

Card 1/3

27903

S/079/61/031/010/008/010

D227/D304

Synthesis of di(methylindenyl)iron

extracted with ether. On concentration and cooling of the extract a black colored solid crystallized out which had a m.pt. of 107-108°C. In the second method, 1-methylindene was added to n-butyllithium in ether and the mixture heated on a water bath until its color changed to deep red. After cooling to 16°C  $\text{FeCl}_2$  was added

and the mixture refluxed for 3 hrs. The reaction product was then concentrated and cooled. A black solid separated out after 12 hrs. About 1/4 of the solid was washed with water, 10% HCl, water and ether, and then recrystallized from ether. Further purification was conducted by distillation at 70°C/3 mm and the m.pt. of the product was 107-109°C. In the third method,  $\text{FeCl}_2$  was added to

1-methyl-indene solution in diethylamine and the mixture stirred for 18 hrs. The residue after steam distillation of the product was dried and redistilled to yield a product m.pt. 107-108°C. The investigations showed that di(methylindenyl)iron is unstable in organic solvents in the presence of air, except in ether at low temperatures. It is sufficiently stable in the dry state and is a

Card 2/5

Synthesis of di(methylindenyl)iron

27908

S/079/61/031/010/008/010  
D227/D304

black crystalline solid m.pt. 107-109°C. There are 13 references: 7 Soviet-bloc and 6 non-Soviet-bloc. The 4 most recent references to the English-language publications read as follows: P. Pouson, G. Wilkingson, J. Am. Chem. Soc. 76, 2024 (1954); P. Pouson, Quart. Rev. 9, 391 (1955); US Patent 2,719,074, H. Gilman, J. Biel, C. Brannen, M. Bullock, G. Dunn, L. Miller, J. Am. Chem. Soc. 71, 1499 (1949).

ASSOCIATION: Moskovskiy khimiko-tehnologicheskiy institut im. D. I. Mendeleyeva (Moscow Institute of Chemical Technology im. D.I. Mendeleyev)

SUBMITTED: December 24, 1960

X

Card 3/3

20323

53700 2209, 1273, 1282

S/020/61/137/001/015/021  
B103/B201

AUTHORS: U Guan-li, Sokolova, Ye. B., Chlenov, I. Ye., and  
Petrov, A. D., Corresponding Member AS USSR

TITLE: Synthesis of monovalent saturated alcohols and tertiary  
acetylene alcohols of the ferrocene series

PERIODICAL: Doklady Akademii nauk SSSR, v. 137, no. 1, 1961, 111-112

TEXT: The authors have for the first time synthesized the following  
alcohols of the ferrocene series: A) Monovalent saturated (Table 1: 1-4),  
and B) Tertiary acetylene alcohols (5-7). ad A): 1 -  $\alpha$ -hydroxy isopropyl  
ferrocene, 2 -  $\alpha$ -hydroxy- $\alpha$ -phenyl ethyl ferrocene, 3 -  $\alpha$ -hydroxy- $\alpha$ -  
phenyl propyl ferrocene, 4 -  $\alpha$ -hydroxy- $\alpha$ -phenyl amyl ferrocene.  
ad B): 5 - 3-methyl-3-ferrocenyl-3-hydroxy propyne-1, 6 - 3-methyl-3-  
ferrocenyl-3-hydroxy propyne-1, and 7 - 3-phenyl-3-ferrocenyl-3-hydroxy  
propyne-1. Alcohols A) were synthesized from acetyl ferrocene and  
benzoyl ferrocene by condensation with Grignard reagents (the latter  
prepared from saturated halogen alkyls) (see scheme no. 1). Conditions  
of synthesis are described in Ref. 1 (Riemschneider, D. Helm, Ber. 89,

Card 1/5

20323

V

Synthesis of monovalent...

S/020/61/137/001/015/021  
B103/B201

1956, 155). The reagents were stirred in benzene solution for 1 hr at 60°C, the reaction mixture was decomposed by saturated NH<sub>4</sub>Cl solution, and the reaction product was recrystallized from diluted ethanol after purification on active carbon. The yield amounted to 58-72%. Alcohols B) resulted from acetylenyl magnesium bromide (prepared according to E. R. H. Jones and coworkers, J. Chem. Soc. 1956, 4765, Ref. 3) after scheme no. 2. As for the latter compound, acetyl ferrocene was dissolved in THF [Abstracter's note: probably tetrahydrofuran] at room temperature, added, stirred for 12 hr, decomposed like sub A), extracted with ether, and the extract was dried with Na<sub>2</sub>SO<sub>4</sub>. The residue from the distillation of the solvent (dark-red liquid) was dissolved in hexane, boiled with active carbon, and the crystal precipitate was purified by recrystallization from diluted alcohol. In addition, the authors synthesized sodium acetylenide (according to H. Normant, B. Angelo, Bull. Soc. Chim. v. 2, 1960, 354, Ref. 4) at -15°C, and used it for condensation with acetyl and benzoyl ferrocene. Acetyl ferrocene dissolved in a THF solution was added to sodium acetylenide at -10°C. After the same treatment as mentioned above, the reaction product was submitted to chromatographic

Card 2/5

20323

Synthesis of monovalent...

S/020/61/137/001/015/021  
B103/B201

analysis by means of  $\text{Al}_2\text{O}_3$ . The authors succeeded in proving that alcohol no. 6 can be prepared in two ways (over  $\text{C}_2\text{HMgBr}$  and over  $\text{C}_2\text{HNa}$ ), whereas no. 7 is formed over  $\text{C}_2\text{HMgBr}$  only. Conversely, they were not able to obtain alcohols B by Favorskiy's reaction. Finally, the fact is stressed that Lotsich's reagent (disubstituted organometallic acetylene reagent) does not react with either acetyl or benzoyl ferrocene. A paper by A. N. Nesmeyanov and coworkers is mentioned. There are 1 table and 4 references: 1 Soviet-bloc and 3 non-Soviet-bloc.

ASSOCIATION: Moskovskiy khimiko-tehnologicheskiy institut im. D. I. Mendeleyeva  
(Moscow Institute of Chemical Technology imeni D. I. Mendeleyev)

SUBMITTED: December 2, 1960

Card 3/5

S/062/62/000/005/006/006  
B110/B101

AUTHORS: Wu Kuan-li, Sokolova, Ye. B., Leytes, L. A., and Petrov, A.D.

TITLE: Synthesis and properties of secondary and tertiary alcohols  
of the ferrocene series

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye khimicheskikh  
nauk, no. 5, 1962, 887 - 892

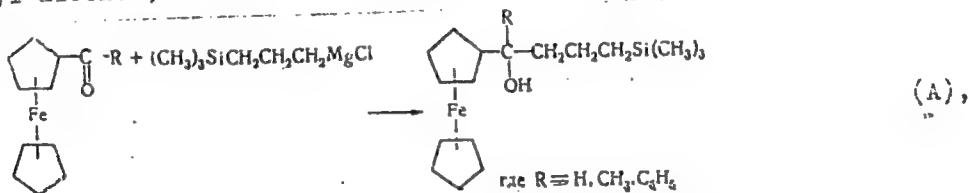
TEXT:  $\alpha$ -hydroxy- $\alpha$ -phenyl-propyl ferrocene was dehydrated: (1) at 120 -  
150°C in the presence of  $\text{KHSO}_4$ . A large amount of resin was obtained,  
and alkyl ferrocene could not be separated as it probably polymerizes  
under the action of the acid agent; (2) on an oil bath at 120 - 150°C  
(residual pressure 200 mm Hg).  $\text{C}_{19}\text{H}_{18}\text{Fe}$  (m.p. 103 - 104°C) was separated  
with a yield of 55 %. Secondary ferrocene alcohols with a yield of 53 %  
were obtained from an ethereal solution of formyl ferrocene and organo-  
magnesium compounds ( $\text{R} = \text{CH}_3, \text{C}_2\text{H}_5, n-\text{C}_4\text{H}_9, \text{C}_6\text{H}_5\text{CH}_2$ ) in slight excess.  
Secondary alcohols with a yield of 81 - 98 % were formed by Grignard  
reagents of methyl iodide, bromobenzene, and benzyl chloride with formyl

Card 1/3

S/062/62/000/005/006/006  
B110/B101

## Synthesis and properties of ...

ferrocene.  $C_2H_{25}MgBr$ ,  $C_2H_{25}MgI$ , and  $C_2H_{25}MgBr$  form ethers. In addition, methyl- and benzyl-ferrocenyl carbinols were dehydrated over granular anhydrous  $Al_2O_3$  at  $200^{\circ}C$  and 36 mm Hg, and also at  $150^{\circ}C$  in the presence of  $HgSO_4$ . Methyl-ferrocenyl carbinol formed di(ferrocenyl-methyl) methyl ether as a main product, and benzyl-ferrocenyl carbinol gave the relevant phenyl-alkenyl ferrocene with a yield of 70 %. Condensation of  $\beta$ -phenyl-vinyl ferrocene with triethyl silane, using  $H_2PtCl_6$  as a catalyst in isopropanol alcohol, failed. According to the Grignard reaction



the following alcohols were obtained by condensing  $\gamma$ -chloropropyl trimethylsilane with carbinol derivatives of ferrocene: (1) ferrocenyl

S/062/62/000/005/006/008  
3110/3101

Synthesis and properties of ...

( $\gamma$ -trimethyl-silyl-propyl) carbinol ( $C_{17}H_{26}FeOSi$ ); (2) ferrocenyl-methyl ( $\gamma$ -trimethyl-silyl-propyl) carbinol ( $C_{18}H_{28}FeOSi$ ); (3) ferrocenyl-phenyl ( $\gamma$ -trimethyl-silyl-propyl) carbinol ( $C_{23}H_{30}FeOSi$ ) with yields of 75, 60, and 50 %, respectively, and with the melting points -28°C (solidification point), -41°C (solidification point), and 98 - 99°C, respectively. There are 5 figures and 2 tables. The most important English-language reference is: F. S. Arimoto, A. C. Haven, J. Amer. Chem. Soc. 77, 6295 (1955).

ASSOCIATION: Khimiko-tehnologicheskiy institut im. D. I. Mendeleyeva (Institute of Chemical Technology imeni D. I. Mendeleyev)  
Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy of the Academy of Sciences USSR)

SUBMITTED: December 13, 1961

Card 3/3

S/079/63/033/001/013/023  
D204/D307

AUTHORS: Sokolova, Ye. B., Shebanova, M. P. and Chou Heng-chin

TITLE: Synthesis of ferrocene analogs

PERIODICAL: Zhurnal obshchey khimii, v. 33, no. 1, 1963, 217-220

TEXT: A continuation of earlier work (ZhOKH, 31, 3379 (1961)) in which di(methylindenyl) iron was prepared by condensing 1-methylindenyllithium with  $\text{FeCl}_2$ . Condensations of 3-ethyl-, 3-butyl-, 3-allyl-, 3-phenyl-, and 3-benzyl-indenyllithium with  $\text{FeCl}_2$  were studied in the present work. In a typical preparation ethereal alkylindene was added, with stirring, to n-BuLi, and the mixture was stirred for 2 hours on a water bath to form the Li derivative.  $\text{FeCl}_2$  (obtained by the reduction of  $\text{FeCl}_3$  with PhCl) was then added in portions to the cooled solution and the reaction mixture was stirred, first for 1 hour at room temperature, then for 2 hours at 100°C. The mixture was then cooled and the ethereal filtrate was

Card 1/2

S/079/63/033/001/013/023

D204/D307

Synthesis of ferrocene ...

poured into ice water acidified with HCl; the organic layer was washed with 5% aq. NaOH, and with H<sub>2</sub>O, and was then dried over MgSO<sub>4</sub>. Ether was then evaporated off, unreacted alkylindenone was removed with superheated steam (200°C) and the residue was distilled, at 2 - 5 mm Hg, under N<sub>2</sub>. Di-(alkylindenyl) iron analogs of ferrocene were obtained; the violet-black ethylindenyl- and allylindenyl derivatives were not, however, fully characterized owing to the difficulty of preparing sufficiently pure starting alkylindenyles. Di(butylindenyl)-, di(phenyliindenyl)-, and di(benzylindenyl) irons were obtained in 10 - 20% yields. The butyl derivative was violet-black, the remaining 2 were black. The benzyl derivative had a m.p. of 131 - 133°C. There are 2 tables.

ASSOCIATION: Moskovskiy khimiko-tehnologicheskiy institut imeni D. I. Mendeleyeva (Moscow Institute of Chemical Technology imeni D. I. Mendeleyev)

SUBMITTED: February 2, 1962

Card 2/2

SOKOLOVA, Ye. B.; SHEBANOVA, M. P.; CHZHOU KHEN-TSZIN<sup>1</sup> [Chou Heng-chin]

Synthesis of ferrocene analogs. Zhur. ob. khim. 33 no.1:  
217-220 '63.  
(MIRA 16:1)

I. Moskovskiy khimiko-tehnologicheskiy institut imeni D. I.  
Mendeleyeva.

(Ferrocene)

45172

15150

S/020/63/148/003/024/037  
B117/B186

AUTHORS: Petrov, A. D., Corresponding Member AS USSR, Sokolova,  
Ye. B., Bakunchik, G. P.

TITLE: Reaction of the methyl esters of ferrocene, mono- and  
dicarboxylic acids with  $\alpha$ - and  $\gamma$ -magnesium halogen alkyl  
silanes

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 148, no. 3, 1963, 598-600

TEXT: It was shown that silico-neopentyl magnesium chloride, which is structurally similar to neopentyl magnesium chloride, reacts anomalously with the methyl ester of ferrocene monocarboxylic acid and produces silico-neopentyl ferrocenyl ketone. The reaction with dimethyl ester of ferrocene dicarboxylic acid also proceeded in a similar way. Here only one ester group reacted and produced ketonic acid ester. Magnesium chloropropyl trimethyl silane reacted normally with the esters mentioned and produced tertiary alcohol and glycol. From the reaction of methyl esters of ferrocene mono- and dicarboxylic acids, the compounds mentioned below were obtained for the first time with Grignard reagents from trimethyl Card 1/2

S/020/63/148/003/024/037  
B117/B186

Reaction of the methyl esters ...

chloromethyl silane and trimethyl- $\gamma$ -chloropropyl silane: (trimethyl silyl)-methyl ferrocenyl ketone,  $C_{15}H_{20}OFeSi$ , melting point  $66^{\circ}C$ , yield 66% by weight; keto ester of ferrocene dicarboxylic acid,  $C_{17}H_{22}OFeSi$ , melting point  $106-108^{\circ}C$ , yield 75% by weight; di- $\gamma$ -(trimethyl silylpropyl)-ferrocenyl carbinol,  $C_{23}H_{40}OFeSi_2$ , melting point  $60-62^{\circ}C$ , yield 90% by weight; 1,1'-bis-[4-hydroxy-1,7-di(trimethyl silyl)-4-heptyl]-ferrocene,  $C_{36}H_{70}O_2FeSi_4$ , melting point  $107-108^{\circ}C$ , yield 87% by weight. There is 1 table.

ASSOCIATION: Moskovskiy khimiko-tehnologicheskiy institut im. D. I. Mendeleyeva (Moscow Institute of Chemical Technology imeni D. I. Mendeleyev)

SUBMITTED: October 23, 1962

Card 2/2

PETROV, A.D.; SOKOLOVA, Ye.B.; SHEBANOVA, M.P.; GOLOVINA, N.I.

Addition of silicon hydrides to dimethylallylferrocenylsilane in  
the presence of H<sub>2</sub>PtCl<sub>6</sub>. Dokl. AN SSSR 152 no.5:1118-1121  
0 '63. (MIRA 16:12)

1. Moskovskiy khimiko-tehnologicheskiy institut im. D.I.Mendeleyeva.
2. Chlen-korrespondent AN SSSR (for Petrov).

SOKOLOVA, Ye.B.; SHEBANOVA, M.P.; TAN TSZUN'-TSZE [T'ang Tsun-chieh];  
TROYANOVSAYA, Ye.A.

Condensation of an allyl-type bromide of the C<sub>7</sub>H<sub>13</sub>Br composition  
with carbonyl compounds and Grignard reagents. Zhur. ob. khim. 34  
no.9:3085-3087 S '64. (MIRA 17:11)

... 1. ... 1. ... 1. ... 1. ... 1. ... 1.

... planned maintenance schedules. Engg. trade , proce.  
A no. 1132-35 of '64. (MTR 18-3)

... tsadurstvennyy komitet pri Sovete Ministrov RSFSR po nadzoru  
za bezopasnym vedeniyem rabot v promyshlennosti i gornomu nadzoru.

W JUAN-LI [Wu Jian-Li]; SOKOLOV, N. I.; GLAVIN, I. Ye.; TIKHON, A. P.

Synthesis of monohydroxy saturated and acetylenic tertiary alcohols  
of the ferrocene series. Dokl. Akad. Nauk SSSR 137 No. 1:111-112 (r-  
1961.) (Zh. 14:2)

1. Novosibirskiy Khimiko-tehnologicheskiy institut im. L.I.  
Terent'yeva. 2. Chlen-Korrespondent Akad. SSSR (for. Petrov).  
(Ferrocene) (nickel)

KATSENOVICH, A.L., prof.; MADZHIDOV, V.M., dotsent; KADYROV, V.K., assistent;  
SHEKHTEL', A.I.; BISEROVA, M.G.; Prinimali uchastiye: KHAVKINA, Ye.B.;  
SADYmenko, I.I.; VASIL'YEVA, T.L.; ATAYEVA, T.I.; MYATISHKINA, Z.I.;  
TUTAYEVA, V.F.; SAIDOV, T.I.; YAKUNINA, N.I.; SOKOLCVA, Ye.G.;  
LOPATO, E.A.; ABDULLAYEVA, N.A.; YELIOKUL'SON, L.M.; BAGDASAROVA, K.A.;  
DENISOVA, A.P.

Some unsolved problems of influenzal infection from the aspect of  
the epidemic of influenza in 1957 and 1959. Med. zhur. Uzb. no.2:  
3-8 F '62. (MIRA 15:4)

(INFLUENZA)

SCHUCHOVÁ, YE.G.; RAKHIM, YE.I.

"The Effect of Fluorescent Lighting on the Time Threshold of Chromatic Fatigue," Trobl. Fiziol. Črtník, Vol 5, 1953, pp 154-160

The effect of fluorescent lighting on the level of relative stability of chromatic vision was studied by determining the time thresholds of chromatic fatigue after preliminary adaptation to light sources with various spectral compositions. A Hæsel anomaloscope, and exposure to light of different wave lengths coming from incandescent and fluorescent day light lamps, were employed. Daylight and white fluorescent light increased the stability of chromatic vision. Yellowlight from an incandescent source was much less effective on the green than on the red perception apparatus of the eye. Irritations close to the spectral composition of daylight considerably affected both apparatus. (RFBiol, No 5, 1954)

SO: Sum. No. 536, 10 Jun 55

RABKIN, Yefim Borisovich, professor; doktor meditsinskikh nauk; SOKOLOVA,  
Ye. G. redaktor; BOBROVA, Ye. N., tekhnicheskiy redaktor

[Polychromatic tables for the study of color sense] Polikhromatiches-  
kie tablitsy dlia issledovaniia tsvetooschushcheniya. Izd. 6-e,  
perer. i dop. [Moskva, Gos. izd-vo med. lit-ry, 1954. 61 p. 30 plates.  
(MIRA 8:3)]  
(Color sense)

Sokolova, Ye.G.

USSR/Optics - Physiological Optics

K-9

Abs Jour : Referat Zhur - Fizika, No 5, 1957, 13181

Author : Sokolova, Ye.G.

Inst : Scientific Research Laboratory, TsNILGE and Laboratory for Color Vision, TsNILGE, Main Military Sanitation Administration, Ministry of Means of Communications, USSR.

Title : Instrument for the Investigation of Stability of Chromatic Vision.

Orig Pub : Probl. fiziol. optiki, 1955, 11, 53-55

Abstract : Description of an instrument for the determination of the minimum (threshold) time of exposure, necessary to destroy the stability of color differentiation. The action of the instrument is based on presenting a field of vision, whose dimensions vary from  $1^{\circ}$  to  $5^{\circ}$ , separated into two halves. The colors of the two halves of the field are varied

Card 1/2

USSR/Optics - Physiological Optics

K-9

Abs Jour : Ref Zhur - Fizika, No 5, 1957, 13181

independently of each other by means of a light-filter installation. The transmission bands of the light filters are on the order of 50 -- 60 millimicrons. The effective wavelengths of the light filters (in millimicrons) are: red 650, yellow 590, green 525, and blue 470. The brightness of the two halves of the field of view can be varied both simultaneously, as well as separately for each field. The disturbance of the stability of color differentiation is established from the ability of determining the color difference between the halves of the field of view at equal brightness. The instrument is a monocular one. The use of light filters makes it possible to use the instrument for extensive clinical practice.

Card 2/2

SOKOLOVA, Ye. G.

SOKOLOVA, Ye. G.: "The functional stability of the light-resolving power of the visual analysor under normal conditions and in certain disorders to the functioning of the central nervous system and the optic apparatus." Acad Med Sci USSR. Inst of Physiology imeni I.P. Pav ov. Leningrad, 1956.  
(Dissertations for degree of candidate in Medical Sciences).

SO: Knizhnaya letopis' No 22, 1956

BARKIN, Yefim Borisovich, prof.; SOKOLOVA, Ye.G., red.; GABERLAND, M.I.,  
tekhn. red.

[Pigmentary tables for studying the acquired pathology of color  
vision] Pigmentnye tablitsy dlja issledovaniia priobretennoi pa-  
tologii tsvetovogo zrenija. Izd.2., perer. i dop. Moskva, Gos.  
izd-vo med.lit-ry Medgiz, 1960. 32 p. plates (MIRA 14:6)  
(COLOR SENSE)

RABKIN, Yefim Borisovich, prof., doktor med. nauk; SOKOLOVA, Ye.G.,  
red.; KUZ'MINA, N.S., tekhn. red.

[Polychromatic charts for studying color perception] Polikhroma-  
ticheskie tablitsy dlia issledovaniia tsvetooshchushcheniiia. Izd.7.,  
perer. i dop. Moskva, Medgiz, 1962. 63 p. plates. (MIRA 15:6)  
(COLOR SENSE)

RABKIN, Ye.B., prof.; SOKOLOVA, Ye.G., kand.med.nauk

Color serves health. Zdorov'e 9 no.5:23-24 My'63. (MIRA 16:9)  
(COLOR--PSYCHOLOGY) (COLOR--PHYSIOLOGICAL EFFECT)

RABKIN, Yefim Borisovich, doktor med. nauk, prof.; SOKOLOVA,  
Yelena Georgiyevna, kand.med.nauk; SOROKO, Ya.I., red.;  
RAKITIN, I.T., tekhn.red.

[Color around us] TSvet vokrug nas. Moskva, Izd-vo  
"Znanie," 1964. 31 p. (Novoe v zhizni, nauke, tekhnike.  
VIII Seriia: Biologija i meditsina, no.4) (MIRA 17:3)



RABKIN, Yefim Borisovich, prof.; SOKOLOVA, Yelena Georgiyevna,  
kand. med. nauk; FRID, Yudol'f Vladimirovich, kand.  
tekhn. nauk; KOVAL'SKIY, Nikolay Nikolayevich, inzh.-  
khim.; CHERNIGOVSKIY, V.N., akademik, red.; KARPOVA,  
N.L., red.

[Aid for efficient color schemes; with colorimetrical  
index of samples] Rukovodstvo po ratsional'nomu tsveto-  
vomu oformleniiu; s naborom kolorimetrirovannykh ob-  
raztsov tsvetov. Moskva, Izd-vo "Transport," 1964. 46 p.  
(MIRA 17:4)

1. Predsedatel' komissii po fiziologicheskoy optike pri  
Institute fiziologii im. I.P.Pavlova AN SSSR (for  
Chernigovskiy).

RABKIN, Ye.B., prof.; SOKOLOVA, Ye.G., kand.med.nauk

Efficient use of color in railroad transportation. Zhel.dor.transp.  
47 no.10:63-65 0 '65. (MIRA 18:10)

1. Rukovoditel' laboratorii tsvetovogo zreniya Vsesoyuznogo  
nauchno-issledovatel'skogo instituta zheleznodorozhnoy gigiyeny  
(for Rabkin).

SOKOLOVA, Ye. I. [deceased]; BRAYNZAROVA, G.T.; BUCHANOVA, N.S.;  
ZHUKHAREVA, V.I.; ZAKUMBAYEV, A.K.; ISAYEVA, M.G.;  
IMAMBAYEVA, U.A.; KRIVOSHEYEV, Yu.O.; KUDAYBERGENOV,  
Zh.D.; RAKHMETCHIN, S.; TYUTYUKOV, F.M.; SHIM, P.S.;  
LAZARENKO, Ye.I.; GARANKINA, A.I.; D'YACHENKO, R.;  
PETUKHOV, R.M., kand. tekhn. nauk, nauchn. red.;  
SHUPLOVA, M.A., red.; LEVIN, M.L., red.; ROROKINA, Z.P.,  
tekhn. red.

[Food industry of Kazakhstan] Pishchevaya promyshlennost'  
Kazakhstan. Alma-Ata, Izd-vo AN KazSSR, 1963. 172 p.

1. Akademiya nauk Kazakhskoy SSR, Alma-Ata. Institut eko-  
nomiki.

(Kazakhstan--Food industry)

DEMENT'YEV, A.P.; ISAYEVICH, N.Ye.; KASHKAROVA, T.D.; SOKOLOVA , Ye.I.;  
TIMOFEEV, L.N.; TIMOFEEV, N.N. (Leningrau)

Forensic psychiatric aspect of the delirium of jealousy and its  
compulsory treatment. Zhur. nevr. i psikh. 63 no.10:1554-1562 '63.  
(MIRA 17:5)

FROLOVA, M.A.; SOKOLOVA, Ye.I.

Study of reactivity of the cells in antitoxic immunity by the tissue culture method. Zhur. mikrobiol., epid. i imm. 41 no. 2:10-15  
(MIRA 17:9)  
F '64.

1. Moskovskiy institut vaktsin i sывороток имени Мечникова.

SOKOLOVA, Ye.I.

Meat and dairy industries of southern Kazakhstan. Trudy  
Inst. ekon. AN Kazakh. SSR 5:89-123 '60. (MIRA 14:9)  
(Kazakhstan--Meat industry)  
(Kazakhstan--Dairy industry)

3(5)

SOV/9-59-7-13/25

AUTHOR: Sazonov, N.

TITLE: On the All-Union Conference on Specification of a Unified Stratigraphic System of Mesozoic Deposits in the Russian Plateau

PERIODICAL: Geologiya nefti i gaza, 1959, Nr 7, pp 60 - 63 (USSR)

ABSTRACT: The All-Union Conference for setting-up a specified unified stratigraphic system of Mesozoic deposits in the Russian plateau took place from December 8th to 13th, 1958 at Moscow. It was attended by 172 delegates from different cities and organizations. The Conference heard 9 reports in plenary sessions and 32 reports in sectional sessions. They were delivered by Ye.I. Sokolova (VNIGRI) on projected subdivision of the Triassic system; N.T. Sazonov (VNIGNI) on the Jurassic system; I.G. Sazonova on the lower section of the Cretaceous systems; S.N. Koltypin (VNIGRI) and D.P. Naydin (MGU) on the upper section of the

Card 1/2

SOV/9-59-7-13/15

On the All-Union Conference on Specification of a Unified Stratigraphic System of Mesozoic Deposits in the Russian Plateau

Cretaceous system. Reports were also delivered by M.M. Moskvin, A.V. Fur senko, I.M. Yamnichenko, O.K. Kaptarenko-Chernousova, G.Ya. Krymgol'ts and others. The Conference approved the subdivision of the above-mentioned systems according to the submitted materials.

Card 2/2

SOKOLOVA, Ye.I.

Dilantin therapy of epilepsy in children and adolescents. Zmnr.nevr.i  
psikh. 53 no.5:385-386 My '53. (MLRA 6:5)

1. Kafedra psichiatrii Izhevskogo meditsinskogo instituta. (Epilepsy)

SOKOLOVA, Ye. I.

Invitro determination of the toxigenic properties of *Corynebacterium diphtheriae* in mixed cultures. Zhur.mikrobiol.epid. i immun. 29 no.5:37-39 My '58  
(MIRA 11:6)

1. Iz Moskovskogo instituta vaktsin i syvorotok imeni Mechnikova.  
(*CORYNEBACTERIUM DIPHTHERIAE*, culture,  
mixed cultures, toxigenic properties (Rus))

СОВАЧУК, В. П.

СОВАЧУК, В. П. -- "Experiment in the Clinical and Functional Study of  
the Thymus and its Effect on Pneumococcal Infection in Ferrets." [In  
USSR]. Soviet Leningrad Medical Inst. Doctor of Medicine I. P.  
Pavlov. Thesis, 1955. (Dissertation for the Degree of Candidate  
in Medical Sciences)

SC: Knizkaya Letovis', No 1, 1956

*Sokolova/VB.I*

Distr: 4E4

*V*Equilibrium systems of the basic and simple oxides of iron in chloride and sulfate salt solutions. A. V. Karakov  
E. I. Sokolova, and A. Z. Vainshtain. Trudy Inst. Geol.  
Metal., Akad. Nauk S.S.R. No. 152, Geol. Ser. No. 64,  
72-92 (1957).—A literature review on limonite, goethite, and  
hydrohematite is given, and goethite and lepidocrocite are  
described. The systems  $\text{FeCl}_3\text{-KOH-H}_2\text{O}$  and  $\text{Fe}_2(\text{SO}_4)_3\text{-KOH-H}_2\text{O}$  at 20° are studied. Analyses (26) of liquid and  
solid phases in the pure chloride system and 12 analyses of  
the same system with sea water and 34 analyses of the sul-  
fate system phases are given. D-spacing data of the solid  
phases and graphs indicating pH conditions during the  
pptns. are included. The solv. of goethite and lepidocro-  
crite is studied. Many references. A. Volborth

6

*RM*

SOKOLOVA, Yelena Ivanovna; LISTOVA, Lidiya Pavlovna; VAYNSHTEYN, Anna Zimil'yevna  
POSTOVALOV, L.V. redaktor; ZAL'TSMAN, Ye.I., redaktor; POLMSITSKAYA,  
S.M., tekhnicheskiy redaktor.

[Equilibrium systems of ferri- and ferrosilicate sulfates and  
chlorides] Ferrisilikatnye i ferrosilikatnye sul'fatnye i khloridnye  
sistemy ravnovessiya. Moskva, Izd-vo Akademii nauk SSSR, 1956. 65.  
(Akademija nauk SSSR. Geologicheskij institut. Trudy, no.3)  
(Silicates) (Sulfates) (Chlorides) (MIRA 9:10)

SOKOLOVA, Ye. I.  
SOKOLOVA, Ye.I.; LISTOVA, L.P.; VAYNSHTEYN, A.Z.

Synthesis of ferri-and ferrosilicates. Dokl. AN SSSR 96 no.6:  
1225-1228 Je '54. (MLRA 7:8)

1. Predstavлено академиком D.I.Shcherbakovym.  
(Iron silicates)

SOKOLOVA, Ye. I.

"The Nature of Brown Mountain-Forest Soils of Crimea," Pedology, No. 8, 1947.

SOKOLOVA, YE. I.

6213

CONDITIONS OF THE FORMATION OF FLUORITE IN  
SEDIMENTARY ROCKS. (THE FLUORITE SYSTEM).

A. V. Kazakov and E. L. Sokolova. Translated by V. L.  
Skilsky from *Trudy Inst. Geol. Nauk, Akad. Nauk S.S.R.*  
No. 114, Geol. Ser. No. 40, 22-64(1950). 76p. (TEI-386)

The formation of fluorite in sedimentary rocks has been investigated by studies of fluorite equilibria in different solutions. Determinations at different temperatures were made on the solubility of crystalline  $\text{CaF}_3$  in chemically pure water, in aqueous solutions of components of sea water— $\text{CaSO}_4$ ,  $\text{NaCl}$ ,  $\text{Na}_2\text{SO}_4$ , and  $\text{MgSO}_4$ —at different concentrations, and in the sea water itself at degrees of salinity varying from normal to a 15-fold concentration. Conclusions are reached on the effects of the various salts and on the consequent possibilities of fluorite precipitation in basins of different types. Facies conditions of fluorapatite and fluorite deposition are derived for successive states of evaporation of saline basins, and the use of the fluorine-phosphorus coefficient as a facies index is suggested. Literature is reviewed. (V.L.S.)

SOKOLOVA YE.I.  
OLYUNIN, V.N.; SOKOLOVA, Ye.I.

On the origin of loess-like deposits at the foot-hills of  
Fergana. Biul.Kom.chetv.per. no.19:65-69 '53. (MLRA 7:11)  
(Fergana--Loess) (Loess--Fergana)

DOMANEVSKIY, Nikolay Alekseyevich; ANTONOV, B.S., redaktor; SOKOLOVA, Ie.I.,  
redaktor; BEGICHEVA, M.N., tekhnicheskiy redaktor.

[River dredging equipment and its operation] Rechnye zemsnariady i  
ikh rabota, Moskva, Gos. izd-vo vodnogo transporta, 1954. 233 p.  
[Microfilm] (MLRA 7:11)  
(Dredging)

SOKOLOVA, Ye. I.

Stratigraphy of the Triassic period in the northwestern part of  
the Donets Basin. Geol.sbor. no.3:60-80 '55. (MLRA 3:6)  
(Donets Basin--Geology, Stratigraphic)

VYALOVA, R.I., redaktor; DROBYSHEV, D.V., redaktor; KOLYGIN, S.N., redaktor;  
MOISEYENKO, V.S., redaktor; SAZONOV, N.T., redaktor; SOKOLOVA, Ye.I.,  
redaktor; YASHCHURZHINSKAYA, A.B., vedushchiy redaktor; GENNAD'YEVA,  
I.M., tekhnicheskiy redaktor

[Proceedings of the All-Union Conference on the Development of a  
Uniform System of Stratigraphy of Mesozoic Deposits of the Russian  
Platform] Trudy Vsesoyuznogo soveshchaniia po razrabotke unifitsirovannoy  
skhemy stratigrafii mezozoiskikh otlozhenii Russkoy platformy.  
Leningrad, Gos. nauchno-tekhn. izd-vo neftianoi i gorno-toplivnoi lit-ry,  
Leningradskoe otd-nie, 1956. 383 p. (MLRA 9:12)

1. Vsesoyuznoye soveshchaniye po razrabotke unifitsirovannoy skhemy  
stratigrafii mezozoiskikh otlozhenii Russkoy platformy, 1954.  
(Russian Platform--Geology, Stratigraphic)

Sokolova, Ye. I.

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 7,  
p 15 (USSR)

15-1957-7-8973

AUTHOR: Sokolova, Ye. I.

TITLE: Unified Scheme of Stratigraphy of the Triassic Rocks  
of the Russian Platform (Project) [Unifitsirovannaya  
skhema stratigrafii triasovykh otlozheniy Russkoy  
platformy (Proyekt)]

PERIODICAL: V sb.: Tr. Vses. soveshchaniya po razrabotke  
unifitsir. skhemy stratigr. mezozoyskikh otlozheniy  
Rus. platformy. Leningrad, 1956, pp 7-18

ABSTRACT: The wide distribution of Triassic rocks on the Russian  
platform, their inadequate study, and the difficulty  
of their subdivision and correlation are noted. The  
author divides the Lower Triassic into the Vetluzhskiy  
and the Baskunchakskiy stages; in the first of these  
he places all continental formations, Buzulukskiy,  
Tananykskiy, Romashkinskiy, and other series, but in

Card 1/3

15-1957-7-8973

Unified Scheme of Stratigraphy of the Triassic Rocks of the Russian Platform (Cont.)

the second he puts only marine rocks, the Bogdinskiy series. Summaries are given for the Lower Triassic rocks of the Donets basin, the Don-Medveditsa uplift, the Bolshoye Bogdo Mountains, the environs of Lake Inder, the Gur'yevsk region, the northern Emba, the Aktyubinsk, Chkalov, and Bashkir Ural region, the Samarskoye trans-Ural region, the northern oblasts, the basin of the Vyatka and Vetyluga, and the swampy forests and the northern part of the Polish-Lithuanian basin. These are brief accounts of the local arrangement of subdivisions, lithology, and fossil discoveries. Middle and Upper Triassic rocks have been identified only within large tectonic downwarps--the northwestern Donets basin, the Caspian basin, and the southern part of the fore-Ural downwarp. Traces of marine rocks of this age occur only in the Inder region. In other places only continental deposits are found, predominantly Upper Triassic, and grouped into a number of series (Protopivskiy, Kurashasayskiy, Kuraylinskiy, Yushatyrskiy, Surakayskiy, and others);

Card 2/3

15-1957-7-8973

Unified Scheme of Stratigraphy of the Triassic Rocks of the Russian Platform (Cont.)

they have a characteristic flora and contain rare remains of quadruped vertebrates. It was proposed that the Rhaetian stage remain in the Triassic. A diagram was prepared comparing the unified scheme of Triassic stratigraphy of the Russian platform with the Triassic schemes of Mangyshlak and the northern Caucasus.

B. P. B'yushkov

Editor's note. The principal objection arises from the uniting of all continental deposits of Lower Triassic age, among which groups of quadruped vertebrates of various kinds and of obviously different ages occur, into the Vetruzhskiy stage, inasmuch as they are rather closely paralleled by marine rocks of the Bogdinskiy series (Tananykskiy and Romashkinskiy series). Thus this grouping violates generally accepted stratigraphic principles.

Card 3/3

SOKOLOVA, Ye.I.

Correlation of the gypsum-dolomite series of the lower Permian in  
the northwestern Donets Basin. Trudy VNIGRI no.95:89-111 '56.  
(MLRA 9:12)  
(Donets Basin--Geology, Stratigraphic)

SOKOLOV, Ye. L.

YUDIN, N.I.

PHASE I BOOK EXPLORATION

SOV/1575

3(6) p- Soviet po izucheniiyu prirodozdat'nykh gornykh 61  
 Akademiya nauk SSSR. Sovet po izucheniiyu prirodozdat'nykh gornykh 61  
 Gornicheskikh mestorozhdenii polozhennykh iskopayemykh (Description  
 of Sedimentary Mineral Deposits) Moscow, Izd-vo AN SSSR, 1958.  
 84 p. 5,000 copies printed.

Sup. Ed.: L.V. Pusovskiy, Corresponding Member, USSR Academy of  
 Sciences; Ed. of Publishing House: G. I. Nosov; Tech. Ed.:  
 S. G. Markovich

PURPOSE: This publication is intended for mining geologists,  
 stratigraphers, petrographers, and mineralogists.

CONTENTS: This collection of articles is devoted to a description of  
 several minerals found in Eastern Siberia, and a discussion of  
 the conditions of their deposition by regions. Individual  
 articles report on the Basovskoye iron ore deposits, the  
 titanium minerals of the Baskul' skree deposit, the iron ore  
 deposits of the Angara-Pitkiy basin and the Khoprinsky region.  
 The articles are accompanied by diagrams, tables, and bibliographic references.

Card 1/3

Serydyshenko, D.P. Devonian Iron-baurite Onilita Formation 3  
 Yerashchenko-Shak, V.A., and M.N. Platonov. Native Iron From  
 Severnaya Iron Ores of the Khoprinsky Region 25  
 Glebov, A.V. Tourmaline and Magnesite Quarzites of the  
 Medvezh'ya River in Southern Yakutia 26  
 Pavlov, V.A. Ferromineral Facies of the Alter Limestone 43  
 Tulin, N.I. Iron Ores of the Angara-Pitkiy Basin 47

Card 2/3

Marelyas, N.M. Titaniferous Minerals From the  
 Bakhchisayye Deposit 61  
 Solntseva, Ye.I., and A.A. Ryabinina. Physicochemical Study  
 of Iron Ores and Their Mother Rocks at the Berezovskoye  
 Deposit in Zaberkal'ye 73

AVAILABILITY: Library of Congress

REV/Atti  
L-30-59

Card 3/3

SOKOLOVA, Ye.I.

[Permian and Triassic sediments in the western and southern parts  
of the Caspian Depression.] Permskie i trisovye otlozheniya zapadnoi  
i iuzhnoci chastei Prikaspiiskoi vpadiny. Leningrad, Gos.nauch-tekhn.  
izd-vo neft. i gorno-toplivnoi lit-ry. Leningr. otd-nie. 1958. 100 p.  
(Leningrad. Vsesoiuznyi neftianoi nauchno-issledovatel'skii geologo-  
razvedochnyi institut. Trudy, no.118) (MIRA 11:11)  
(Caspian Depression--Geology, Stratigraphic)

3(5) PHASE I BOOK EXPLOITATION SOV/1827  
Vesorunnyye sanchno-iissledovatel'skii geologo-vedochuy neftyanoy  
izdat

Geologiya i nafto-gazonnosti "Jugo-vostochnykh rayonov Russkoy Plastinovoy oborony stany (geology and Oil and Gas Bearing Characteristics of the Southeastern Regions of the Russian Platform, Collection of Articles) Leningrad, Gosgeotekhnicheskay, 1958. 242 p. Errata slip inserted. 1,200 copies printed.

Resp. Ed.: Ye.S. Ivantsov. Eds.: M.J. Suren'tar, M.J. Il'ina, and S.A. Sakhnovskiy. Tech. Ed.: A.B. Yeshchurinskaya. Executive Ed.: N.V. Sulkov.  
PURPOSE. This book is intended for petroleum exploration geologists, particularly those interested in the Russian platform areas.  
CONTENTS. These articles, originally read at a meeting of the Scientific and Technical Council of Ministry of Petroleum Industry (1953), discuss the geologic structure of the southern part of the Russian platform, the planning of exploratory and prospecting work, and special problems in geochemistry. Studies are aimed at realizing the oil and gas potential of the area. Representatives of VNIIGMI, VNIIG, the Geological and Geophysical Trust, 'Giprotnor', 'Kazatnaftogorsk', and 'Grozneft', contributed to the work. No references are given.  
Card 4/5

eastern parts of the Russian platform, the planning of exploratory and prospecting work, and special problems in geochemistry. Studies are aimed at realizing the oil and gas potential of the area. Representatives of VNIIGMI, VNIIG, the Geological and Geophysical Trust, 'Giprotnor', 'Kazatnaftogorsk', and 'Grozneft', contributed to the work. No references are given.

TABLE OF CONTENTS:

	SOV/1827
Geology and Oil and Gas Bearing (Cont.)	
✓ Ivantsov, Ye.S. Results of the VNIIGMI Explorations in the Western Part of the Prilekaspisayskaya Depression	101
✓ Ivantsov, Ye.I. Results of the Permian and Triassic Studies in the Prilekaspisayskaya Depression	120
✓ Dushetdin, G.Ish. Tectonic Structure of the Northern Part of the Kostanayskaya and the Western Part of the Stalinogradskaya Oblasts	130
✓ Grashin, Ye.-A. Results or Studies Made by the Stalinograd-Refregazravdina Trust on the Structures Adjacent to the Prilekaspisayskaya Depression	146
✓ Marper, P.A. The Devonian of the Stalinogradskaya Oblast'	161
✓ Tarikov, G.M. The Lithological and Stratigraphic Characteristics of the Carboniferous Sediments of the Stalinogradskaya Oblast' and the Prospects of their Bearing Gas and Oil	172
✓ Shuprikhev, R.M. Basic Features of the Tectonics and Paleogeography of the Stalinogradskaya Province	182

Card 4/5

AYZENSHTADT, G.Ye.-A.; DNEPROV, V.S.; KOLTYPIN, S.N.; SOKOLOVA, Ye.I.

Oil and gas potentials of the southern Emba region and adjacent  
southern territories. Geol.nefti 2 no.9:19-25 S '58.

(MIRA 11:10)

l.Vsesoyuznyy neftyany nauchno-issledovatel'skiy geologo-razvedochnyy  
institut.  
(Kazakhstan--Gas, Natural--Geology)

Geol. Russ.

Unified Stratigraphy of the Triassic of the Russian Platform. Trud MIIGeO, no. 191, 17 vol., 1 '60.  
(MIRAN 14.7)  
(Russian Platform. Geologic, Stratigraphic)

OLYUNIN, V. N., SOKOLOVA, Ye. I.

Mineral composition of loess type sediments in the foothills of  
the Fergana Valley. Trudy Inst. geog. 80:118-123 '60.  
(MIRA 13:8)

(Fergana--Loess)

SOKOLOVA, Yekaterina Ivanovna; IVANOVA, Yekaterina Nikolayevna; YEGOROV,  
Ivan Petrovich; KOROBKOV, I.A., nauchnyy.red.; DAYEV, G.A., vedushchiy  
red.; FRUMKIN, P.S., tekhn.red.

[Permian and Triassic sediments in the Yuzhnaya Emba and their oil  
potential] Permskie i triasovye otlozheniya IIuzhnoi Embi i ikh  
neftenosnost'. Leningrad, Gos.nauchno-tekhn.izd-vo neft.i gorno-  
toplivnoi lit-ry. Leningr.otd-nie, 1961. 194 p. (Leningrad.  
Vsesoiuznyi neftianoi nauchno-issledovatel'skii geologorazvedochnyi  
institut. Trudy, no.164). (MIRA 14:8)  
(Emba Valley--Petroleum, Geology)

SOKOLOVA, Yelena Ivanovna; PUSTOVALOV, L.V., otv. red.; FEODOT'YEV,  
K.M., red. izd-va; MAKOGONOV, I.A., tekhn. red.

[Physicochemical investigation of sedimentary iron and manganese  
ores and enclosing rocks (oxidation-reduction and basic-acid  
properties of sedimentary ore-bearing complexes)] Fiziko-  
khimicheskie issledovaniia osadochnykh zheleznykh i margantsevykh  
rud i vmeshchayushchikh ikh porod (okislitel'no-vosstanovitel'nye  
i shchelochno-kislotnye svoistva osadochnykh rudonosnykh kompleksov).  
Moskva, Izd-vo Akad. nauk SSSR, 1962. 214 p. / (MIRA 15:5)

1. Chlen-korrespondent Akademii nauk SSSR (for Pustovalov).  
(Iron ores) (Manganese ores)

FEL'DSHTEYN, E.I., doktor tekhn. nauk; MISHIN, P.A.; SOKOLOVA, Ye.I.;  
FEYGIN, Z.E.

Sulfo-cyaniding of metal-cutting tools. Avt. prom. 29 no.4:  
37-39 Ap '63. (MIRA 16:6)

1. Minskiy avtozavod.  
(Case hardening)  
(Metal-cutting tools)

L 36335-65 EWT(1)/ECC GW  
ACCESSION NR; AT5005821

S/3116/64/271/006/0065/0069

11  
10  
B+1

AUTHOR: Sokolova, Ye, K.

TITLE: The effect of observation errors on the accuracy of the polynomial approximation to the altitudes of isobaric surfaces

SOURCE: Leningrad. Arkticheskiy i Antarkticheskiy nauchno-issledovatel'skiy institut. Trudy, v. 271, 1964. Chislennyye metody issledovaniya gidrometeorologicheskikh usloviy v Arktyke s ispol'zovaniyem elektronnykh tsifrovых vychislitel'nykh mashin; sbornik statey (Numerical methods of investigating hydrometeorological conditions in the Arctic using electronic digital computers; collection of articles), no. 1, 65-69

TOPIC TAGS: numerical forecasting, electronic digital computer, polynomial approximation, altitude estimation, isobaric surface, atmospheric pressure, error estimation, Borisenkov method

ABSTRACT: The paper deals with the effects of gross errors on the accuracy of the polynomial approximation for the absolute geopotential field of standard isobaric surfaces of 800, 700, 500, 300, 200 and 100 mb using Borisenkov's method, for a dense network of stations. The effect of random measurement errors on accuracy is also considered and tentative recommendations are made for correcting

Card 1/2

L 36335-65  
ACCESSION NR: AT5005821

errors by pre-editing data. A third-order polynomial approximation was used, coefficients were determined by the least squares method with the aid of the Ural-2 electronic computer, and the mean errors obtained were tabulated. It was concluded that the error in approximating the geopotential by a power series for a dense network of stations was; 0.3-0.4 gp dkm for the 850, 700, 500 and 300 mb stations and 0.5-0.7 gp dkm for the 200 and 100 mb stations, the error slightly increasing with height. Errors greater than 5 gp dkm may be considered to be gross and should be corrected in pre-editing. Orig. art. has; 1 table, 2 figures and 1 equation.

ASSOCIATION: Arkticheskiy i Antarkticheskiy nuachno-issledovatel'skiy institut,  
Leningrad (Arctic and Antarctic Scientific Research Institute)

SUBMITTED: 00

ENCL: 00

SUB CODE: ES, DP

NO REF Sov: 001

OTHER: 000

Card

2/2 *pk*

ZERCHANINOV, L.K.; SOKOLOVA, Ye.K.

Opisthorchiasis and diphyllobothriasis in Sverdlovsk Province. Med.  
paraz.i paraz.bol. 26 no.6:714-717 N-D '57. (MIRA 13:4)

1. Iz parazitologicheskogo otdela Sverdlovskogo nauchno-issledo-  
vatel'skogo instituta epidemiologii i mikrobiologii Ministerstva  
zdravookhraneniya RSFSR (direktor instituta G.F. Bogdanov).  
(SVERDLOVSK PROVINCE--WORMS, INTESTINAL AND PARASITIC)  
(LIVER FLUKE)

SOV/79-29-2-37/7:

AUTHORS: Mel'nikov, N. N., Sokolova, Ye. M., Trunov, P. P.

TITLE: On the Field of Organic Insectofungicides (Iz oblasti organicheskikh insektofungitsidov). XL. Synthesis of Some New Sulfamide Derivatives (XL. Sintez nekotorykh novykh proizvodnykh sul'famidov)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 2, pp 529-532 (USSR)

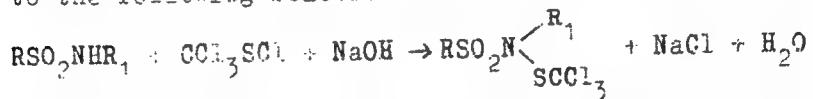
ABSTRACT: Recently many products containing the trichloro-methyl mercapto group have been suggested as fungicides which have only a low toxic effect on plants and warm-blooded animals. Substances of this kind are primarily the trichloro-methyl thioamides and the imides of various carboxylic and sulfo acids (Refs 1-3), the trichloro-methyl esters of thiosulfo acids (Ref 4), etc. In connection with that, the authors investigated various organic compounds containing the trichloro-methyl mercapto group. First, various trichloro-methyl thioamides of the sulfo acid of the fatty and aromatic series were synthesized and investigated. It was shown herein that also some sulfo acidamides without the trichloro-methyl mercapto group are active insectofungicides, especially the n-thiocyanic anilides of methane acids and n-

Card 1/2

SOV/79-29-2-57/7:

## On the Field of Organic Insectofungicides. XL. Synthesis of Some New Sulfamide Derivatives

chloro-benzene sulfo acids which so far have not yet been described. The sulfo acid amides were synthesized by reaction of chloric anhydrides of the corresponding sulfo acids with amine excess in an organic hydrophobic solvent. The sulfo acid amides synthesized for the first time are listed in table 1. The trichloro-methyl thioamides of sulfo acids were obtained according to the following reaction in alkaline medium:



The compounds synthesized and their properties are listed in table 2. Three of them are new. Not every sulfamide that contains the trichloro-methyl mercapto group is a strong fungicide; only the products 1-3 and 5-7 possess this property (Table 2). There are 2 tables and 7 references, 2 of which are Soviet.

ASSOCIATION: Nauchnyy institut po udobreniyam i insektofungitsidam  
(Scientific Institute of Fertilizers and Insectofungicides)

SUBMITTED: December 28, 1957

Card 2/2

MEL'NIKOV, N.N.; SOKOLOVA, Ye.M.; SKALOZUBOVA, A.V.; TRUNOV, P.P.; ZUBOV,  
M.F.; GOLYSHIN, N.M.

Investigation of new copper-free fungicides for green plants  
and new mercury-free seed disinfectants. [Trudy] NIUIF no.164:  
16-20 '59. (MIRA 15:5)  
(Fungicides) (Seeds--Disinfection)

MEL'NIKOV, N.N.; ZETKIN, V.I.; LIBMAN, B.Ya.; SOKOLOVA, Ye.M.; ZAKHAROV,  
Ye.V.; PARFENOV, A.I.; TRUNOV, P.P.; GOLYSHIN, N.M.

Organic fungicides as substitutes for copper-containing preparations.  
(MIRA 15:2)  
Khim. prom. no.10:28-30 0 '61.  
(Fungicides)

TRUNOV, P.P.; SOKOLOVA, Ye.M.

Improved method for preparing perchloromethyl mercaptan. Khim.  
prom. no.10:30-32 0 '61. (MIRA 15:2)  
(Methanethiol)

MEL'NIKOV, N.N.; SOKOLOVA, Ye.M.; TRUNOV, P.P.

Ethylene-bis-dithiocarbamate of zinc as a substitute for copper  
preparations. [Trudy] NIUIF no.171:111-116 '61. (MIRA 15:7)  
(Fungicides) (Zinc organic compounds)

MEL'NIKOV, N.N.; SOKOLOWA, Ye.M.; TRUNOV, P.P.; BRUSENINA, G.I.

Preparation of captan, a fungicide. Zhur.prikl.khim. 34 no.11:  
2550-2554 N '61. (MIRA 15:1)

(Captan)

L 04964-67

EWT(m)/EWP(j)/EWP(t)/ETI

LJP(c) JD/WB/RM

ACC NR: AP6006723

SOURCE CODE: UR/0303/66/000/001/0053/0055

AUTHOR: Sokolova, Ye. M.; Naumova, S. F.; Mikhaylovskiy, Yu. N.; Zubov, P. I.

47

46

B

15

ORG: none

TITLE: New rapid method of evaluating the protective properties of polymer coatings on metals in corrosive mediaSOURCE: Lakokrasochnyye materialy i ikh primeneniye, no. 1, 1966, 53-55

TOPIC TAGS: protective coating, corrosion

ABSTRACT: A rapid method is proposed for evaluating the protective properties of coatings on metals in any corrosive media (i. e., liquid electrolytes, nonelectrolytes or gaseous media). It involves the recording of the change in the resistance of the metal base during the testing. PE-500 polyethylene, PVKh-990 polyvinyl chloride and Teflon were thus tested (in the form of films 90, 190 and 60  $\mu$  thick respectively) in HCl and HNO<sub>3</sub> vapors. The polymer films were bonded with polyisobutylene adhesive to magnesium films evaporated onto glass (magnesium was chosen as the metal base because of its high corrosion activity). In the HCl atmosphere, magnesium begins to dissolve immediately after the sample comes in contact with the HCl vapor. The protective properties of the polymer films studied increase in the series polyvinyl chloride - Teflon - polyethylene for both HCl and HNO<sub>3</sub>. The results lead the authors to recommend this method as a means of evaluating the protective properties of paint and

UDC: 667.61

Card 1/2

L 04964-67

ACC NR: AP6006723

varnish and insulation coatings on metals. Orig. art. has: 4 figures and 1 formula.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 008/ OTH REF: 004

Card 2/2 *Hh*

ACC Nbr: AP0025390

SOURCE CODE: UR/0366/66/002/CJ/1196/1199

AUTHOR: Volodkovich, S. D.; Liberman, G. I.; Mel'nikov, N. N.; Sokolova, Ye. M.

ORG: All-Union Scientific Research Institute of Chemicals for Plant Protection  
(Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh sredstv zashchit rasteniy)

TITLE: Organic insectofungicides. XC VIII. Synthesis of some trichloroalkyl- and dichloroalkenyl dithiocarbamates

SOURCE: Zhurnal organiceskoy khimii, v. 2, no. 7, 1966, 1196-1199

TOPIC TAGS: insectofungicide, dithiocarbamate ester, chloroderivate, INSECTICIDE, PESTICIDE

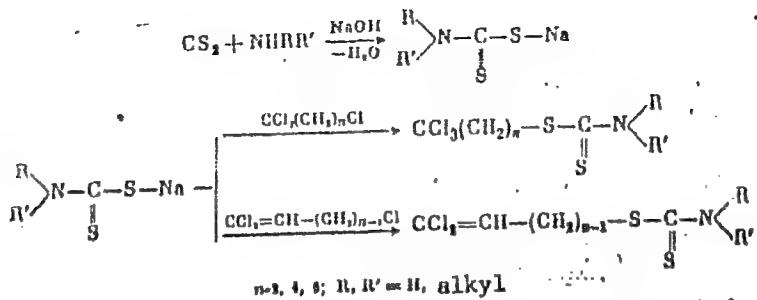
ABSTRACT:

In a search for new pesticides, the following previously unreported tri-chloroalkyl and dichloroalkenyl thiocarbamates (shown in the table) were obtained according to the two-stage reaction:

Card 1/4

UDC: 542.955.2 : 547.5

ACC NR: AP6025390



These new compounds showed low pesticidal activity.

Card 2/4

ACC NR: AP6025390

Table. 1

No.	Compound	mp or bp ( $\rho$ in mm)	$n_D^{20}$	$d_4^{20}$	M.R.		Yield (in %)	Found %		Formula	Calculated %	
					Found	Calcd		α	s		Cl	s
1	$(CH_3)_3N-C-S(CH_3)_2CCl_3$	63-63.5°	—	—	—	—	68	36.43	31.58	$C_6H_{13}Cl_3NS_3$	36.16	31.73
2	$(CH_3)_3N-C-S-(CH_3)_2CH=CCl_3$	160 (0.63)	1.5045	1.2803	60.37	68.70	62	27.83	34.24	$C_6H_{13}Cl_3NS_3$	37.61	34.80
3	$(C_2H_5)_3N-C-S-CH_2CH_2CCl_3$	82-83	—	—	—	—	40	36.48	21.16	$C_8H_{17}Cl_3NS_3$	26.12	21.75
4	$(C_2H_5)_3N-C-S-CH_2-CH=CCl_3$	32-33	—	—	—	—	74	26.11	23.77	$C_8H_{17}Cl_3NS_3$	27.51	24.80
5	$(C_2H_5)_3N-C-S-(CH_3)_2CCl_3$	42-44	—	—	—	—	53	32.24	20.17	$C_6H_{13}Cl_3NS_3$	33.02	19.87
6	$(C_2H_5)_3N-C-S-(CH_3)_2CH=CCl_3$	148-150 (0.16)	1.5756	1.2088	78.17	78.02	40	24.47	22.43	$C_8H_{17}Cl_3NS_3$	24.83	22.37
7	$(iso-C_3H_7)_3N-C-S-(CH_3)_2CCl_3$	192-195 (0.85)	1.5628	1.2182	93.22	93.81	29	29.70	19.24	$C_8H_{17}Cl_3NS_3$	30.28	18.30
8	$(iso-C_3H_7)_3N-C-S-(CH_3)_2CH=CCl_3$	168-170 (0.15)	1.5654	1.1723	87.20	87.28	28	23.40	21.09	$C_8H_{17}Cl_3NS_3$	22.61	20.40

Card 3/4

ACC NR: AP6025390

Table. 1 (cont.)

No.	Compound	mp or bp (p in mm)	$n_D^{20}$	$d_4^{20}$	M.R.		Calor. lated	Field (in D)	Found %		Formula	Calculated %	
					Found	Calor. ated			Cl	S		Cl	S
9	(iso-C <sub>3</sub> H <sub>7</sub> ) <sub>2</sub> N—C—S—(CH <sub>2</sub> ) <sub>5</sub> CCl <sub>3</sub>	102—103 (0.55)	1.5485	1.1777	101.93	101.90	33	28.32	16.92		C <sub>10</sub> H <sub>22</sub> Cl <sub>3</sub> NS <sub>2</sub>	28.17	16.83
10	(iso-C <sub>3</sub> H <sub>7</sub> ) <sub>2</sub> N—C—S—(CH <sub>2</sub> ) <sub>5</sub> CH=CCl <sub>3</sub>	178—180 (0.4)	1.5550	1.1429	96.05	96.59	45	20.82	18.47		C <sub>10</sub> H <sub>22</sub> Cl <sub>3</sub> NS <sub>2</sub>	20.70	18.71
11	CH <sub>3</sub> NH—C—S—(CH <sub>2</sub> ) <sub>5</sub> CCl <sub>3</sub>	59—62	—	—	—	—	15	38.50	22.45		C <sub>7</sub> H <sub>16</sub> Cl <sub>3</sub> NS <sub>2</sub>	37.96	22.81
12	iso-C <sub>3</sub> H <sub>7</sub> NH—C—S—(CH <sub>2</sub> ) <sub>5</sub> CCl <sub>3</sub>	70—71	—	—	—	—	22	—	20.19		C <sub>8</sub> H <sub>18</sub> Cl <sub>3</sub> NS <sub>2</sub>	—	20.73
13	C <sub>6</sub> H <sub>5</sub> NH—C—S—(CH <sub>2</sub> ) <sub>5</sub> CCl <sub>3</sub>	125—128 (10)	1.5215	1.1739	83.52	83.12	54	23.03	19.68		C <sub>10</sub> H <sub>18</sub> Cl <sub>3</sub> NG <sub>2</sub>	23.02	19.83
14	C <sub>6</sub> H <sub>5</sub> NH—C—S—(CH <sub>2</sub> ) <sub>5</sub> —CH=CCl <sub>3</sub>	130 (0.65)	1.5260	1.1320	77.41	77.81	30	—	22.42		C <sub>10</sub> H <sub>18</sub> Cl <sub>3</sub> NG <sub>2</sub>	—	22.87

[W.A. 50; CBE No. 10]

Orig. art. has: 1 table and 1 formula.

SUB CODE: 07 / SUBM DATE: 21Jul65 / ORIG REF: 003 / OTH REF: 011 /

Card 4/4

ACC NR: AP6027905

SOURCE CODE: UR/00614/66/000/008/0009/0012

AUTHOR: Mel'nikov, N. N.; Bezobrazov, Yu. N.; Trunov, P. P.; Sokolova, Ye. M.; Nayanov, L. D.; Burdakova, A. P.; Balashova, T. V.

ORG: none

TITLE: Preparation of zineb by a one-stage method

SOURCE: Khimicheskaya promyshlennost', no. 8, 1966, 9-12

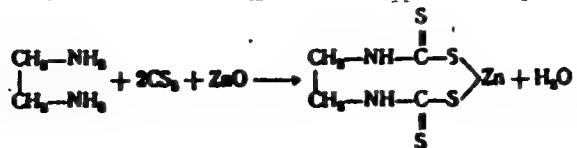
TOPIC TAGS: fungicide, zineb ~~preparation~~, zinc compound, CHEMICAL PRODUCTION

ABSTRACT: Zineb, [ethylenebis(dithiocarbamato)] zinc, a most effective fungicide but non-toxic for mammals, is produced in large amounts. To select an economical method for commercial production of zineb, various known methods of its preparation are reviewed and compared. It is shown that the previously described one-stage method, involving the reaction (USSR patent, No. 144470, 1961, published in 1962):

Card 1/2

UDC:661.7:547.496.2'313.2'147-38

ACC NR: AP6027905



and later modified by using an NH<sub>3</sub> solution to decrease the losses of ethylenediamine (USSR patent, No. 161728, 1962, published 1964) is recommended as the most economical method of commercial production of zincb. [PS]

[WA-50; CBE No. 14]

SUB CODE: 07/4/SUBM DATE: none / ORIG REF: 003/ OTH REF: 008

Card 2/2

SOKOLOVA, Ye.N.

Characteristics of visualization in school children of various ages  
during the process of modeling. Vop. psikhol. 8 no.1:81-88 Jan '62.  
(MIRA 15:4)

1. Institut psichologii Akademii pedagogicheskikh nauk RSFSR,  
Moskva.

(MODELING) (PERCEPTION)

1. SOKOLOVA, Ye. N.
2. USSR (600)
4. Bibliography - Russia - Public Works
7. Books for extracurricular reading in physics and technology for students in the seven-year school. Fiz. v shkole 12, no. 6, 1952.
9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

BELOGORSKAYA, N.I.; GALININ, D.D.; GORYACHKIN, Ye.N.; GLAZYRIN, A.I.; DUBOV, A.G.; YEVROPIN, Yu.P.; YENOKHOVICH, A.S.; ZVORYKIN, B.S.; IVANOV, S.I.; KRAUKLIS, V.V.; LAVROVSKIY, K.F.; MENSHTUTIN, N.F.; MINCHENKOV, Ye.Ya.; NABOKOV, M.Ye.; PERYSHKIN, A.V.; POPOV, P.I.; POKROVSKIY, A.A.; REZNIKOV, L.I.; SAKHAROV, D.I.; SOKOLOV, I.I.; SOKOLOVA, Ye.N.; EVENCHIK, E.Ye.; YUS'KOVICH, V.F.

Sergei Nikolaevich Zharkov. [Obituary]. Fiz.v shkole 16 no.3:94-95 My-Je '56.  
(Zharkov, Sergei Nikolaevich, 1883-1956) (MIRA 9:7)

SOKOLOVA, Yevgeniya Nikolayevna; DROZHIN, Yu.N., red.; NATANOV, M.I.,  
tekhn. red.

[Center of gravity] TSentr tiazhesti. Moskva, Gos. uchebno-pedagog.  
izd-vo M-va prosv. RSFSR, 1958. 94 p. (MIRA 11:12)  
(Center of mass)

SOKOLOVA, Ye.N. (Moscow)

Special features of physics teaching in boarding schools. Fiz. v  
shkole 18 no.4:43-45 Jl-Ag '58. (MIRA 11:7)  
(Physics--Study and teaching)